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SALARY SURVEY

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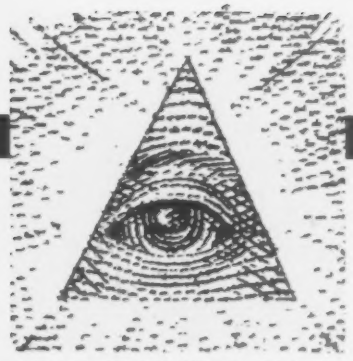
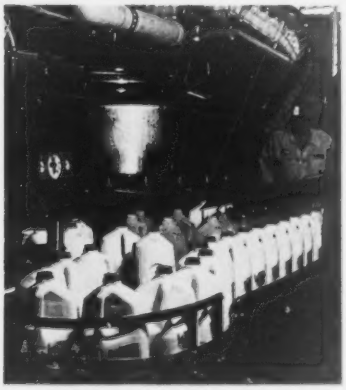


ABOUT THE COVER

Salary freezes and employee layoffs, long held at bay, are now cropping up throughout the food industry, reports *FE*'s annual survey of salaries and job satisfaction.
PAGES 41 TO 46



SPECIAL EMPHASIS
PAGES 48 TO 54

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ENGINEERED FOODS

16 **QC Is Paramount at Almond Plant**
Foreign material, especially stones, is a serious problem.

16 **'Companion' Ingredients and Prototypes**
The systems approach to product development has garnered a lot of attention from food technologists.

PROCESSING & CONTROL

24 **Food Plants '91 Has International Appeal**
Plant design and manufacturing show takes global view.

24 **Are You 'World Class'?**
Benchmark study of over 100 food plants puts world class manufacturing efforts into perspective.

27 **New *Sous Vide* Plant**
A division to produce extended shelf-life foods is formed.

FOOD PACKAGING

34 **Largest EVOH Plant Begins Production**
An on-time start-up for the world's largest ethylene vinyl alcohol copolymer plant amid fears of EVOH glut.

34 **Filler Receives FDA Approval**
Aseptic pouch packaging machines win approval.

FEATURES

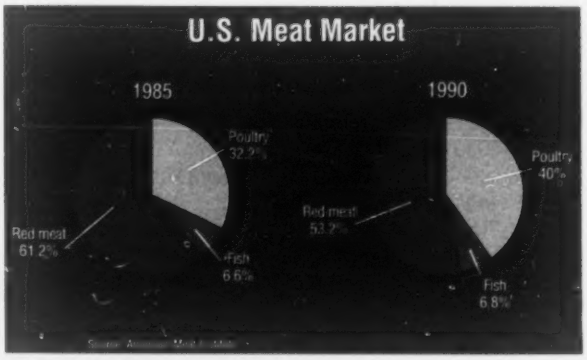
41 **Annual Salary Survey**
Food industry salaries gouged by the recession.

48 **Programmable Controllers Gain Power**
Programmable controllers have come a long way from their primitive origin as relay replacers 20 years ago.

INDUSTRY REPORT

AMI includes Canada & turkey processors

The American Meat Institute (AMI), looking beyond red meat and national boundaries, has expanded its membership to include poultry and Canadian packers and processors. Also, a larger role was announced for AMI members who supply equipment, ingredients and services to industry members. Supplier members will also be represented on the AMI Board of Directors.



Poultry is taking a bigger bite out of the meat market.

Meanwhile, the European Community's (EC) move to relist ten additional U.S. meat plants as eligible to export to the EC was viewed by the U.S. meat trade as a positive step toward reducing trade barriers. The EC had objected to U.S. meat imports on the basis that the U.S. meat industry practice of using hormones was dangerous to human health. The U.S. has maintained the EC move is purely protectionist.

And, now, a panel of ***leading European scientists reaffirmed the safety of U.S. meat.*** *The European Alliance for Safe Meat released a report entitled,* Hormones in Meat Production, *which confirms that the proper use of hormones in livestock is safe and more effective in ensuring consumer safety than the present ban.*

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Food Plants '91 features 'world class' technologies, strategies

More than 325 people from food-processing and engineering firms convened in Dallas, Oct. 2-4, for Food Plants '91, the sixth annual plant-design and manufacturing conference conducted by Food Plant Strategies and co-sponsored for the second year by *Food Engineering*.

Cost Trends, Average vs. Best Plants (1987 to 1990)

	Average	Best
Total costs	1.4% ▲	9% ▼
Material costs	1.6 ▲	5 ▼
Value-added costs	0 ▲	10 ▼

Source: A.T. Kearney, Inc.

One repeat attendee described the conference as "the annual meeting of the food plant engineering business," noted William H. LeMaire of Food Plant Strategies. Conference highlights included microwave sterilization at P&T Foods (Belgium), open CIM at Unilever, and time-compression strategies at Campbell Soup and Kraft General Foods. Other highlights follow.

For conference proceedings, contact: Food Plant Strategies, Inc., 122 S. Church St., West Chester, PA 19382.

Are you 'world class'?

At Food Plants '91, the cliche "world class" was put into perspective by William H. Windle, vice-president of A.T. Kearney, in Kearney's 1990 "benchmark study" of more than 100 food plants operated by 40 companies in North America and Europe. The study included firms such as Kraft General Foods, Campbell Soup, Coca-Cola, Heinz, Kellogg, and Sara Lee. Following the first benchmark study in 1987, the 1990 study assessed each company against the original study in 14 areas such as quality, customer service, costs, technology and flexibility.

Unlike the earlier study, said Windle, some clear leaders were discernible in 1990. In the area of quality, the best performers are eliminating the traditional quality-control function, making operators more responsible for in-process quality, and applying TQM (Total Quality Management) programs for continuous improvement.

The best companies are also flattening plant organization by three or four levels; widening supervisory control to ratios like 25:1; boosting the ratio of hourly to salaried people by 6 or 7:1; and establishing self-directed, team-oriented work forces.

Average utilization of plant capacity is 50 percent, but the best plants have reached 75 percent and are driving higher. While it takes the average plant 48 minutes to make a product changeover on-line, the best plants are doing it in 10. On average, process control is automated on 40 percent of production lines; in the best plants, 90 percent of the lines are automated. The best companies are applying DCS (distributed control systems) to integrate process, quality and production controls. Through vendor partnerships and improved flexibility, the best plants have reduced raw-material inventories to five days vs. the average 14, and finished-goods inventories to five days vs. the average 30.

Capital replaces more labor in the best plants, where capital expense is 13 percent of total

Highlights: Food Plants '91; world class; sous vide; chilled foods.

manufacturing cost as compared to 7 percent in the average plant. The labor cost of maintenance is only 5 percent of hourly payroll in the best plants versus 10 percent in the average plant.

European food plants are similar in performance to North American plants, said Windle. While European process technology is slightly more modern, North Americans are better at managing people.

A.T. Kearney, Inc., 222 S. Riverside Plaza, Chicago, IL 60606
Circle 301 ▲

New *sous vide* plant

At Food Plants '91, Idle Wild Farm reported creation of a new division tentatively called Quality Cuisine, Inc. (QCI) to produce extended shelf-life foods via *sous vide* and/or clean-room conditions as a contract packer, said Technical Services Director H. Louis Cooperhouse. QCI operates an $8.5 million, 55,000 sq. ft. plant built at Pomfret Center, CT four years ago by General Foods to produce its now-discontinued *Culinova* line of chilled entrees. More recently it was used by Kraft General Foods to produce its *Chillery* and *Fresh Creations* lines.

First client: Idle Wild Farm, for 2 million lbs. of *sous vide* meat and poultry products showing 15-30 percent gains in yield and significant quality improvements, said Cooperhouse.

QCI offers equity interest to food companies or financial institutions who share QCI's confidence in the business, and marketing partnerships with firms interested in establishing a proprietary position.

Idle Wild Farm, 153 Searles Rd., Pomfret, CT 06259 **Circle 302**

Benefits of *Sous Vide* vs. Conventional Cooking

Improved	Reduced
Taste	Shrink
Texture	Waste
Moisture retention	Labor
Flavor retention	Space
Nutrition levels	Salt
Consistency	Preservatives
Yields	
Flexibility	

Source: H. Louis Cooperman, Idle Wild Farm.

Promise, pitfalls of chilled foods

The "living laboratory" of the past decade provided a learning curve for the development of chilled foods, said H. Louis Cooperhouse, director of technical services at Idle Wild Farm and former vice-president of technical operations at Culinary Brands. (*Editor's note:* Culinary Brands, a *sous vide* packer in Stockton, CA, shut down last spring when Nestlé—a major investor—withdrew its support in favor of bolstering its Stouffer's frozen-food business.)

Key to the learning curve: understanding the technologies involved. "Every change to product formulation and process has been shown to significantly impact resultant quality, shelf life and safety," Cooperhouse continued.

Of the three basic chilled-foods technologies—modified-atmosphere packaging (MAP), cook/fill/chill and *sous vide*—"in my opinion *sous vide* offers the highest quality, safety and extended shelf life," said Cooperhouse. It is, however, the most complicated and requires the longest learning curve. He nevertheless predicted that "*sous vide* will be the predominant technology for processing of chilled foods sold at retail in the year 2000."

Other key lessons on the learning curve:

- A chilled-foods project does not follow classical marketing strategy. "You must allow the market to be *technologically* driven," he added.
- Maintain "super-chill" temperatures (30-34°F) throughout the cold chain, from manufacturing plant to consumer refrigerator (*FE* May, July '91.) This boosts product shelf life two to four times.
- Use TTMs (time/temperature monitors), which recognize actual product abuse. "Use-by" codes are meaningless.
- Change merchandising tactics. Retailer insistence on full display cases, and processor concerns about being out of stock, lead to surplus inventory that typically is not rotated and lies in the case for a third of its shelf life. Best store location is the meat or deli department, not end-aisle kiosks.
- Boost the image of freshness. Cooperhouse believes that MAP is negatively perceived by consumers: Products are typically overpackaged, and the perception of "air" in the package does not convey "freshness." Vacuum-packaged products, however, *are* perceived as "fresh," so "*sous vide* products, packaged in trays with peelable lids, will be much better received."
- Build safety into product and process by applying HACCP principles and microbiological barriers.

While slow in arriving, the recession is now impacting the food industry, resulting in smaller raises and increased layoffs.

ROBERT E. HARVEY
MANAGING EDITOR

ANNUAL SALARY SURVEY

RIDING OUT THE RECESSION

The symptoms are painfully obvious: the food industry, overexposed to an ailing economy, is, at last, showing signs of illness.

Last year, while a recession-spawned miasma was choking growth elsewhere, food industry employees were enjoying, on average, a healthy seven percent increase in salary.

However, this year average increases were an anemic 2.7 percent, according to *Food Engineering's* annual survey of salary issues and job satisfaction among food industry professionals.

While raises are down, the percent of employees receiving compensation over and above their base salary rose slightly in 1991 compared to a year ago. About 46.9 percent of those surveyed received added compensation this year vs. 46.0 percent in 1990. Interestingly, out of that 46.9 percent, 20.8 percent (only 19.4 percent in 1990) received compensation that was more than 10 percent above and beyond their salary.

Efforts to cope with the prolonged recession have meant fewer pay raises (but additional compensation) and increasingly lean operations. As a result,

SALARY SURVEY

Salary by Job Title (in thousands of dollars)

	Under 25	25-29.9	30-34.9	35-39.9	40-44.9	45-49.9	50-54.9	55-59.9	60-69.9	70 or more
President	9.0%	4.5%	–	1.5%	4.5%	1.5%	3.0%	11.9%	4.5%	58.2%
V.P./manufacturing	4.5	–	2.3	4.5	2.3	–	9.1	2.3	15.9	59.6
V.P./marketing	5.9	5.9	11.8	11.8	–	5.9	4.8	–	17.6	29.4
Plant manager	1.1	3.3	6.6	14.3	12.1	12.1	12.1	9.9	17.6	16.5
Production supervisor	4.8	4.8	16.1	19.4	12.9	9.7	8.1	6.5	9.5	9.7
Engineering manager	–	2.6	5.3	3.9	5.3	14.5	17.1	14.5	17.1	19.7
Project engineer	0.8	1.5	5.3	12.2	16.8	14.5	16.0	9.2	16.0	7.6
Packaging manager	–	–	16.0	16.0	8.0	12.0	12.0	8.0	8.0	20.0
Purchasing manager	2.3	6.8	13.6	20.5	6.8	15.9	6.8	4.5	13.6	9.1
Technical director	1.4	2.8	5.6	8.4	2.8	12.7	9.9	8.4	9.9	38.0
QC manager	4.8	10.4	15.2	19.2	18.4	5.6	8.0	4.0	8.0	6.4
Food technologist	8.5	12.4	17.8	14.7	10.1	8.5	13.2	3.1	7.0	4.7
Marketing/product/ sales manager	–	7.4	5.9	11.8	14.7	11.8	10.3	4.4	17.6	16.2
Sanitation/ maintenance manager	5.9	7.8	7.8	15.7	17.6	17.6	9.8	5.9	3.9	7.8
Transportation/ distribution manager	5.0	5.0	15.0	15.0	20.0	10.0	5.0	10.0	5.0	10.0
Purchasing agent	–	20.0	10.0	20.0	20.0	30.0	–	–	–	–

Percentages may not add up to 100 due to incomplete or duplicate answers.

Source: Food Engineering 1991 Salary Survey.

Median Salary by Sex

		% increase over 1990
Male	$51,778	2.81
Female	37,364	2.35

Source: Food Engineering 1991 Salary Survey.

managers find themselves responsible for more people: on average 35 people in 1991 compared to 33 people in 1990 details the survey.

At the same time, some 38 percent of those polled this year report personnel cuts in their department, compared to 35 percent in 1990.

Stripped-down food and beverage processing operations, while welcomed by some, are not everyone's cup of tea. "New 'flatter' organizations have removed the traditional ladder of success," complains one survey respondent. "Personal satisfaction must be found outside work since advancement opportunities just do not exist anymore."

"Things are tight and getting tighter," laments another.

Despite problems like smaller raises, limited advancement, and increased responsibility, food industry

Median Salary by Education

Ph.D.	$67,916
Master's degree	57,777
Bachelor's degree	47,699
Some college	42,285
High School or less	41,562

Source: Food Engineering 1991 Salary Survey.

Median Salary by Job Title

President	$95,999*
VP Manufacturing	75,713
VP Marketing	53,749
Plant Manager	52,499
Production Supervisor	41,874
Engineering Manager	55,454
Project Engineer	49,604
Purchasing Manager	44,999
Technical Director	58,749
Quality Control Manager	40,108
Food Technologist	38,815
Marketing/Product/Sales Manager	49,374
Sanitation/Maintenance Manager	50,999
Other	46,028

*The median salary level shown for president is suspect because most are self-employed or employed by small companies, and much of the compensation at this level is non-salary—bonuses, profit-sharing etc.

Source: Food Engineering 1991 Salary Survey.

Job Responsibility and Satisfaction

Have your job responsibilities increased in the last year?

	Male	Female
Increased	63%	74%
Decreased	4%	2%
Stayed the same	32%	23%

Rate your overall level of job satisfaction.

	Male	Female
Good balance of responsibility, salary and prospects	40%	36%
Two of the three factors	37%	43%
Only one of the three factors	15%	14%
None of the three factors	5%	6%

Percentages may not add up to 100 due to incomplete or duplicate answers.

Source: Food Engineering 1991 Salary Survey.

employees—with the major exception of women—are maintaining a relatively high level of contentment. Levels of job satisfaction experienced by workers over the past several years, despite the worsening recession, have stayed on an even keel. For example, this year nearly 40 percent of those surveyed indicated a high level of job satisfaction (defined as a balance of responsibility, salary and prospects), the same percentage as 1990.

Interestingly, satisfaction apparently varies inversely with educational levels. About 59 percent of those surveyed with a high school diploma or less expressed satisfaction with their work, while at the other end of the scale, only 36 percent of those employees with Ph.D.s indicated satisfaction.

Women constitute one significantly dissatisfied segment of the workplace. The survey indicates that they have been hit harder than men by recessionary fallout. While women constitute some 17 percent of the food industry's professional workforce, salary increases for them in 1991 averaged a meager 2.4 percent.

Also, while education levels are similar (for example, about 75 percent of both the men and women surveyed have college degrees) men continue to take home larger pay checks.

For instance, some 60 percent of the males surveyed make over $40,000, while only 24 percent of the

SALARY SURVEY

Median Salary by Region

Mid-Atlantic	$52,856
Pacific	51,718
South Atlantic	50,624
East South Central	48,749
Mountain	47,999
West North Central	47,691
East North Central	46,687
West South Central	46,249
New England	44,166

Source: Food Engineering 1991 Salary Survey.

Median Salary by Product

Pasta	$53,332
Beverage	53,046
Grain mill	52,940
Other	52,410
Fat & oil	50,832
Bakery	49,624
Fruit & vegetable	49,090
Seafood	48,749
Confection	48,249
Meat	45,207
Dairy	44,890

Source: Food Engineering 1991 Salary Survey.

Median Salary by Company Size

Small (1-249 Employees)	$45,713
Medium (250-2499 Employees)	46,749
Large (2500+ Employees)	52,027
All companies	49,088

Source: Food Engineering 1991 Salary Survey.

Median Salary by Experience

	Food	Total
Less than 6 years	$37,499	$34,903
6-9 years	40,881	40,999
10-14 years	45,624	44,814
15-20 years	52,916	51,922
21-24 years	55,594	55,118
25-29 years	57,726	57,272
30+ years	60,713	60,892

Source: Food Engineering 1991 Salary Survey.

women's salaries exceed this sum. In 1991, the median salary for men was $51,778 and for women, $37,364.

Some of the discrepancy is explained by the large influx of women into the food industry in recent years. While 20 years is the median level of industry experience for men, it is only 10 years for women, so a good deal of the salary inequities can be attributed to experience. But lack of experience does not explain all the discrepancies.

According to prior *Food Engineering* surveys, the salary gap between men and women, while substantial, had been narrowing as older men retired and younger women gained more experience. However, this year that trend has been reversed. While the median salary for men rose a low 2.8 percent in 1991, the increase was 0.4 percent larger than the median salary increase received by women.

And low raises are not women's only complaint.

"As a female, I feel I work harder for less money than my peers," asserts one respondent.

"In our company, in certain positions, males are paid up to forty percent more although they have less experience and education," notes another.

Still, on the positive side:

"While older female food company employees may still face discrimination, recent college graduates—women and men—appear to be making similar salaries here."

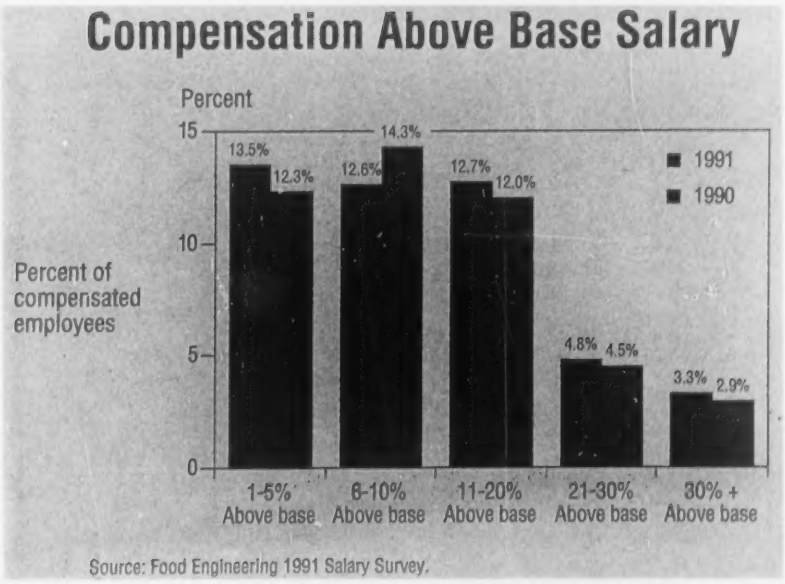
How do men feel? Well, several of those surveyed are crying reverse discrimination: "Advancement for white males is very bleak. Promotions here are not based on performance but rather on quotas."

While less satisfied with their jobs than their male counterparts, females on the whole are more satisfied with their jobs this year than last: 35.7 percent expressed satisfaction in 1991 compared to 31 percent in 1990. On the other hand, some 40.2 percent of the males, both this year and last, said they were happy with their work.

Besides tightening operations due the recession, food companies are also adjusting their focus. The shift is away from solely high volume production toward more high-tech, value-added, niche-oriented operations. Due to this refocus, the companies are trying harder to attract and keep employees with advanced degrees. Evidence of this effort can be seen in the size of the salary increases of those with advanced degrees compared with other food industry employees.

For example, according to the survey, the median salary of those with a high school degree or less in 1990 was $41,785; in 1991 it was a little worst: $41,562. College graduates fared little better: in 1990 the median salary was $46,372, in 1991, $47,699.

However, the median salary of someone with a master's degree was $52,082 in 1990, but $57,777 this



Source: Food Engineering 1991 Salary Survey.

year. Those with doctorates made $64,000 in 1990 and $67,916 in 1991.

As the figures indicate, food companies increasingly are rewarding education, but sometimes to the detriment of experience, say some respondents:

"Too many [companies] are wrapped up in degree requirements to fill positions so that many valuable potential employees are overlooked. One's job experience should have equal or more weight in judging one's abilities to perform a job...."

Many employees see the writing on the wall, however. In response to the survey question: "What is the greatest obstacle that might be stopping you from performing your job more effectively," a large number mentioned insufficient education:

"I'm about three semesters away from a degree in chemistry. I've worked in this industry for ten years, but experience doesn't mean anything anymore. Without a degree (and a B.S. isn't good enough anymore), it's impossible to advance or get your foot in the door of a new organization."

States another: "It's amazing how companies treat their most experienced people: with the lowest salary increases...."

And a third: "All our management people were told several years ago that no promotions above supervisor would be given to people without college degrees. This destroyed my incentive...."

While some are worrying about education, a few are simply concerned about survival: "It's difficult to work when each day they might shut the plant down."

To get their point across, some respondents turned to analogy: "My job is like the Vietnam War: Win the war but don't shoot your gun. You have no bullets (no authority)."

Others turn to paradox: "Salaries paid to lower-level management compared to union labor are not comparable."

Some expressed discouragement: "Call me a nice guy, but when somebody who is extremely pushy gets 50 percent more money because he has an MBA, I can get a *might* discouraged.

While others grew philosophical: "It seems as if we are all working harder and longer, but maybe I'm just getting older." Or: "I am happy with my job responsibilities and salary, and that's scary—from everything I read and hear, nobody is supposed to be happy with their job."

With the caveat that people, particularly those answering surveys, tend to accentuate the negatives and understate the positives, the underlaying tone of this year's survey responses was overwhelmingly bleak.

"Quality is not as important in a tough economy. Products that used to be rejected are now acceptable in order to cut waste. Very short sighted," cautions one.

Warns another: "I feel that food technology as a profession is a poor field—getting worse, and I do not feel this is a field for the future."

And a third: "The poor economy and numerous corporate takeovers have caused layoffs and consolidations that have greatly reduced morale and job satisfaction throughout this company as well as many others in this country." ▲